

## ***Resources for Generators of Food Residuals***

This DRAFT listing, compiled by DEP, is intended to provide free Web-based information and resources for facilities generating food waste, also known as **food residuals**. The contents do not necessarily reflect the views and policies of the DEP, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

- Section One provides Massachusetts resources that address specific questions (page 1)
  - Section Two provides resources in broad-based categories, sorted by sector (pages 2-6).
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### ***Section One: Massachusetts Resources***

These resources provide access to existing resources for food residual generators to reduce food residuals in Massachusetts.

#### **Where Can I Get Assistance for Reducing/Recycling Food Residuals?**

*Department of Environmental Protection* offers technical assistance and provides support and grants to businesses and municipalities on food residuals reduction services and projects:

- Businesses: <http://www.mass.gov/dep/recycle/business.htm>, and
- Municipalities: <http://www.mass.gov/dep/recycle/cities.htm>

*WasteCap* provides technical assistance, basic information, and resources that Massachusetts based businesses and institutions need to plan, start, or maintain a program to reduce food residuals.

<http://www.wastecap.org/wastecap/commodities/organics/organics.htm#Food%20tips>

*The Center for Ecological Technology (CET)* assists in government and private efforts to increase organic waste recycling by designing, implementing, troubleshooting and/or evaluating studies, plans and projects. <http://www.cetonline.org/FarmBusiness/farm%20composting.htm>

#### **How Can I Donate Food Residuals to Charities?**

WasteCap's Web site lists many options for donating food, including food banks and smaller food collection organizations in the Greater Boston area. This list is not meant to be all-inclusive, but mentions a few of the major resources available.

[http://www.wastecap.org/wastecap/commodities/organics/food\\_donations.htm](http://www.wastecap.org/wastecap/commodities/organics/food_donations.htm)

#### **Where Can I Find Listings of Food Residuals Haulers/Feeders/Renderers?**

Waste Cap's Web site lists many options for food residuals management.

- Food and Organic Residuals Haulers Listing: A list of haulers who accept food residuals for composting or animal feed. Some will also take yard waste and other compostables: [http://www.wastecap.org/wastecap/commodities/organics/food\\_haulers.htm](http://www.wastecap.org/wastecap/commodities/organics/food_haulers.htm)
- Licensed Composting Facilities in Eastern Massachusetts: A list of farms and composting facilities approved by the Department of Environmental Protection to process food and other organic materials: [http://www.wastecap.org/wastecap/commodities/organics/composting\\_facilities.htm](http://www.wastecap.org/wastecap/commodities/organics/composting_facilities.htm)
- Licensed Food Residuals Feeders Listing: A list of farmers who have obtained a permit from the Massachusetts Department of Food and Agriculture to collect food residuals, cook it, and feed it to their livestock: [http://www.wastecap.org/wastecap/commodities/organics/waste\\_feeders.htm](http://www.wastecap.org/wastecap/commodities/organics/waste_feeders.htm)

- Rendering Haulers Listing: A list of haulers that will pick up grease and animal processing by-products, and sell it to rendering plants to make tallow for soap-making: <http://www.wastecap.org/wastecap/commodities/organics/renderers.htm>

## ***Section Two: More Comprehensive Information and Broad-Based Resources***

These Web sites provide a wide variety of free resources and models for generators of food residuals that can be adapted and replicated in Massachusetts, including:

- fact sheets (with a short list of tips, suggestions and strategies);
- guidance manuals (with a longer set of recommendations, workbooks, and audit forms);
- educational materials (posters and slide presentations); and,
- case studies (documenting success stories).

### **Where Can I Learn the Basics of Reducing Food Residuals?**

*California Integrated Waste Management Board* includes a comprehensive approach to managing food residuals including resources to help generators: prevent food residuals, feed people, convert to animal feed and/or rendering, and compost. <http://www.ciwmb.ca.gov/FoodWaste/>

*The Green Plan for the Food Service Industry*, North Carolina Division of Pollution Prevention and Environmental Assistance website covers food residuals, oil and grease, and solid waste, and has fact sheets, guidance manuals, training tools, posters, slide presentations (many materials available in multiple languages as well). <http://www.p2pays.org/food/main/intro.htm>

*The Pennsylvania Department of Environmental Protections* website includes basic standards for designing a waste reduction program, a virtual waste audit and tip sheets for several types of commercial businesses.

<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/Tips/tipcover.htm>

*The Commercial Waste Reduction Clearinghouse Web Page*, Oregon Department of Environmental Quality website includes many useful downloadable manuals, audit and cost/benefit forms. <http://www.deq.state.or.us/wmc/solwaste/cwrc/index.html>

*US EPA's Compost Web Page*: fact sheets and manuals on composting.

<http://www.epa.gov/compost/>

### **Sector-Specific Resources and Publications**

These publications, divided by sector, provide examples of publications that food residuals generators in the following sectors can adapt for their own use:

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|-------------------------------------|------------------------|
| • Cross-Sector                      | • Health Care          |
| • Grocery Stores and Supermarkets   | • State Government     |
| • Restaurants and Food Service      | • Local Government     |
| • Colleges and Universities         | • Public School (K-12) |
| • Hospitality                       | • Special Events       |
| • Food Processing and Manufacturing | • Stadiums             |

## **Cross Sector**

*Waste Not, Want Not: Feeding the Hungry and Reducing Solid Waste Through Food Recovery*, U.S. Environmental Protection Agency and the U.S. Department of Agriculture's guide that helps explain how any state or municipality, as well as any private business that deals with food, can reduce its solid waste by facilitating the donation of surplus food according to the food waste reduction hierarchy. The food hierarchy refers to feeding people first, then animals, then recycling, then composting. <http://www.epa.gov/epaoswer/non-hw/reduce/wastenot.htm>

*Good Samaritan Law* The "Good Samaritan Food Donation Act" (Public Law 104-210) makes it easier for businesses to donate to food banks and food rescue programs. It protects donors from liability when donating to nonprofit organizations and protects donors from civil and criminal liability should the product donated in good faith later cause harm to other recipients. <http://www.usda.gov/news/pubs/gleaning/appc.htm>

The U.S. Environmental Protection Agency's (EPA's) *Don't Throw Away That Food: Strategies for Record-Setting Waste Reduction* is a series of two-page case studies that document the results of nine instances in which businesses and institutions reduced their food residuals management costs, including: a grocery store, a supermarket chain, a hospital, a public event, a prison system, a government office building, a public-private partnership, and a college. Each fact sheet provides a model for developing programs, including: a project description, costs and benefits, tips for replication and contact information. <http://www.epa.gov/epaoswer/non-hw/reduce/food/food.htm>

EPA's *WasteWise Update: Recovering Organic Wastes—Giving Back to Mother Nature* This fact sheet provides examples of waste reduction techniques undertaken by a food processor, a casino, a prison, a corporate cafeteria, school food service, and a textile manufacture. It also provides basic information on the science of composting and tips on getting started with organics recovery. <http://www.epa.gov/wastewise/pbs/wwupda12.pdf>

*Business Food Waste Briefing Paper: Options for Grocers Restaurants and Food Processors*, published by WasteCap of Wisconsin, reviews the many options available for reducing food residuals. <http://www.wastecapwi.org/documents/foodwaste.pdf>

*Food Waste Management for Businesses*, Seattle Business and Industry Resource Venture <http://www.resourceventure.org/foodwaste.htm>

*U.S. Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System* (LEED) lists the intent, requirements, submittals, and technologies/strategies for qualifying, and also includes the LEED Checklist, including designing buildings to accommodate recycling. [http://www.usgbc.org/Docs/LEEDdocs/LEED\\_RS\\_v2-1.pdf](http://www.usgbc.org/Docs/LEEDdocs/LEED_RS_v2-1.pdf)

*International Biodegradable Products Institute*, in a joint project with the U.S. Composting Council, provides food residuals generators and compost professionals with independent verification regarding the biodegradability of plastic products, some of which are used in food service setting (cups, lids, bags, flatware). <http://www.bpiworld.org/products.html>

## **Grocery Stores/Supermarkets**

*Supermarket Recycling Organics Initiative* (ROI) Toolkit is available from WasteCap of MA. Check the WasteCap Web site for future availability or call: 617-236-7715.

<http://www.wastecap.org/wastecap/Services/sroi/sroimain.htm>

*A Grocery Store Manager's Guide to Initiating a Composting Program for Grocery Store Organic Waste*. Available by request: Robert Butler or Gerald Nolte. College of Agriculture, Food and Environmental Sciences. UW-River Falls. 410 S. 3rd St. River Falls, WI 54022. 715-425-3985.

## **Restaurants and Food Service**

Guidance Specifically Related to Food residuals:

- *Food Service Waste Reduction Tips and Ideas* (CIWMB)  
<http://www.ciwmb.ca.gov/BizWaste/FactSheets/FoodSrvc.htm>
- *Food for Thought: Restaurant Guide to Waste Reduction and Recycling* (CIWMB)  
<http://www.ciwmb.ca.gov/Publications/BizWaste/44198016.pdf>
- *Restaurant Cuts Disposal Costs by Reducing and Recycling Solid Waste*, a brief case study, published by the Minnesota Technical Assistance Program  
<http://www.mntap.umn.edu/food/86-Thunderbird.htm>

General Guidance on Waste Reduction that includes sections devoted to food residuals:

- *Restaurant Waste Reduction Manual: A Step-by-Step Approach to Developing a Waste Reduction Campaign*. This restaurant waste reduction manual, funded by Missouri Department of Natural Resources, provides a step-by-step approach to developing a waste reduction campaign. <http://www.p2pays.org/ref/03/02368.pdf>
- *Recycling and Waste Reduction in the Restaurant Industry*, prepared by the Wisconsin Department of Natural Resources, provides a brief set of tips and guidelines for waste reduction, including food residuals  
<http://www.dnr.state.wi.us/org/aw/wm/publications/recycle/PUBL-CE-282-2001.pdf>
- *Starbucks-Alliance for Environmental Innovation Partnership*, prepared by The Alliance for Environmental Innovation, is a report on reducing the environmental impact of retail store operations. [http://www.environmentaldefense.org/Alliance/Starb\\_index.htm](http://www.environmentaldefense.org/Alliance/Starb_index.htm)

## **Colleges and Universities**

See many of the resources above, especially under food service.

*Grassroots Recycling Network's Campus Zero Waste Campaign* has compiled a list of publications and case studies of effective campus food residuals composting programs.

[http://www.grrn.org/campus/campus\\_compost.html](http://www.grrn.org/campus/campus_compost.html)

*Getting an 'A' at Lunch: Smart Strategies to Reduce Waste in Campus Dining*, written by INFORM, describes simple strategies that have been successfully employed on campuses around the country to reduce this waste through more efficient materials use.

<http://www.informinc.org/getatlunch.php>

## **Hospitality**

*Recycling Guidebook for the Hospitality and Restaurant Industry*. This guidebook, prepared by the Washington Metropolitan Council of Governments, provides the steps that restaurants and hotels can follow to implement a waste reduction and recycling program. It profiles ten business programs that have successfully established these programs.

<http://www.mwcog.org/dep/recycle/mentor/guide.htm>

*Waste Reduction in Hotels and Motels: A Guide for the Lodging Industry in Florida.* This workbook, prepared by the Florida Department of Environmental Protection, was designed to help hotel management and staff implement and maintain an effective waste reduction program, including managing food residuals.

[http://www.dep.state.fl.us/waste/quick\\_topics/publications/shw/recycling/GreenHotel/hotels.pdf](http://www.dep.state.fl.us/waste/quick_topics/publications/shw/recycling/GreenHotel/hotels.pdf)

### **Food Processing and Manufacturing**

*WasteWise Update Food Processing Industry Factsheet* provides a sampling of waste reduction commitments and achievements – ranging from reducing product packaging to buying manufacturing supplies in bulk. <http://www.epa.gov/wastewise/about/id-food.htm>

*Source Reduction and Management Alternatives for the Food Processing Industry*, provides waste reduction tips from MNTAP.

<http://www.mntap.umn.edu/food/fs76-r17.htm>

*A Pollution Prevention Guide for Food Processors*, published by Delaware Department of Natural Resources and Environmental Control. <http://www.dnrec.state.de.us/del-proc.htm>

*Pollution Prevention Resource Center of the Pacific Northwest* resources for the food processing industry include listings of Web-based resources, some of which are devoted to food residuals.

<http://www.pprc.org/pprc/sbap/food.html>

### **Health Care**

*Reusable Totes, Blue Wrap Recycling, and Composting*—The last part of the three-part fact sheet addresses food composting in hospitals. Produced by U.S. EPA Region 9 Pollution Prevention Program. <http://www.ciwmb.ca.gov/WPIE/HealthCare/EPATote.pdf>

### **State Government**

*California Resources for State Agency Waste Management*, including some resources on food residuals. <http://www.ciwmb.ca.gov/StateAgency/>

### **Local Government**

*Food Waste Recovery: A Model for Local Government Recycling and Waste Reduction; and, Food Scrap Reduction Case Studies* This publication was funded by CIWMB and profiles the food recovery efforts taking place in California municipalities.

<http://www.ciwmb.ca.gov/LGLibrary/Innovations/FoodWaste/>

<http://www.ciwmb.ca.gov/FoodWaste/CaseStudies/>

*Organics Recycling Program* of the City of Portland, Oregon has numerous publications for businesses. <http://www.sustainableportland.org/FSgrated.html>

### **Public Schools (K-12)**

Massachusetts DEP's publications include resources for starting and managing a school-composting program.

- *School Composting Resource Package* contains an outline for a school composting presentation; composting activities for students; “masters of composting” graphics; worm composting information; fruit fly control fact sheet; instructions for performing a school waste audit; list of composting curricula, equipment and other resources for educators; and description of compost bins available under state contract. (32 pages) (rev. 1998)
- *School Composting Program Outline* includes tips for establishing a school composting program.(6 pages) (1995)

Available by request from: [Ann.McGovern@state.ma.us](mailto:Ann.McGovern@state.ma.us); or write to DEP Composting Program; One Winter St., 9th Floor; Boston, MA 02108; (617) 292-5834

*The Grassroots Recycling Network* has compiled a listing of publications and case studies of school-based composting projects. [http://www.grn.org/kids\\_recycle/composting.html](http://www.grn.org/kids_recycle/composting.html)

*School Composting...The Next Step in Recycling: A Manual for Connecticut Schools* developed by the Connecticut Department of Environmental Protection.  
<http://www.dep.state.ct.us/wst/compost/schmanual.htm>

Cornell Composting Homepage Web site provides access to a variety of composting educational materials and programs developed for schools. <http://www.cfe.cornell.edu/compost/schools.html>

### **Special Events**

These can be state fairs, festivals, sporting events with multiple food vendors or conferences and workshops with food served.

#### *U.S. EPA*

Planning Environmentally Aware Events

<http://epa.gov/epaoswer/non-hw/reduce/grn-mtgs/index.htm>

Green Meetings

<http://www.epa.gov/oppt/greenmeetings/>

CIWMB fact sheet on waste reduction tips.

<http://www.ciwmb.ca.gov/FoodWaste/Compost/SpEvents.htm>

*Waste Reduction Tips for a Green Conference or Event* provided by the Oregon Department of Environmental Quality. <http://www.deq.state.or.us/wmc/solwaste/cwrc/wrstrategy/grevent.html>

*Special Events Recycling and Waste Management* prepared by the Wisconsin Department of Natural Resources, provides a brief set of tips and guidelines for waste reduction, including food residuals. <http://www.dnr.state.wi.us/org/aw/wm/publications/recycle/PUBL-CE-281-2001.pdf>

### **Stadiums**

*International Olympic Committee* adopted a zero waste policy and implemented a waste reduction program. [http://www.olympic.org/uk/organisation/commissions/environment/index\\_uk.asp](http://www.olympic.org/uk/organisation/commissions/environment/index_uk.asp)

*Seattle's SafeCo Field Case Study*, published by Seattle's Business and Industry Resource Venture. <http://www.resourceventure.org/PDF/Safeco.pdf>